

BAVAYIA CYCLURA (Forest Bavayia). **PREDATION.** Limited data available on the New Caledonian skink, *Lioscincus nigrofasciatus*, indicates that it preys on cockroaches, other large insects, and smaller skinks (e.g., *Caledoniscincus* sp.; Bauer and Sadler 2000. The Herpetofauna of New Caledonia, Society for the Study of Amphibians and Reptiles. 310 pp.). Here, we add to the data on its prey base with an observation of predation on the gecko, *Bavayia cyclura*.

We made the observation at 0900 h on 3 December 2002 during a field study on laticaudine sea snakes conducted during November–December on Îlot Porc-Epic (22°19'S, 166°34'E [datum: IGN 72]; elev. 36 m). We captured an adult specimen (estimated at 90 mm SVL) of *L. nigrofasciatus* on a tree trunk about 6 m from the shoreline, on the edge of the open forest following the beach. It regurgitated a recently dead adult (49 mm SVL) female *Bavayia cyclura*.

The skink was photographed and released; the gecko (MNHN 2002.0763) was deposited in the herpetological collection of the National Museum of Natural History, Paris, France. Handling of the lizards was done under Permit N° 6034-3588/DRN issued to Ivan Ineich by Direction des Ressources Naturelles de la Province Sud, New Caledonia.

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CARLIA MUNDA (NCN). **PREDATION; FIRE RESPONSE.**

Few accounts of predation on Australian lizards exist that identify predator and prey to a species level. Moreover, sparse data exist on the response of most Australian reptiles to fire, despite its widespread occurrence and importance in shaping vegetation associations (see reviews in Gill et al. [eds.] 1981. Fire and the Australian Biota. Australian Academy of Science, Canberra. 582 pp.; Jacobs 1984. In Cogger and Cameron [eds.], Arid Australia, pp. 131–142. Australian Museum, Sydney; Bowman 2003. In Abbot and Burrows [eds.], Fire in Ecosystems of South-west Western Australia, pp. 108–118. Backhuys Publishers, Leiden). Data are notably poor for species inhabiting Porcupine Grass (*Triodia* spp.) hummock grasslands, a structurally distinctive vegetation unique to Australia (Suijdendorp 1981. In Gill et al. [eds.], Fire and the Australian Biota, pp. 417–424. Australian Academy of Science, Canberra; Jacobs, *op. cit.*) that frequently dominates reptile habitats in arid zones on sandy and rocky substrates. Hence, here we document a predation event on the lygosomine skink, *Carlia munda*, and its apparent relationship to fire in a *Triodia*-dominated vegetation near the northwest edge of the Great Sandy Desert in Western Australia.

At 1930 h (night) on 21 December 1985, MP observed a freshly road-killed mature Brown Falcon, *Falco berigora berigora*, in close association with two dead but intact *C. munda* on the NW coastal Hwy 6.7 km S of Cane River Crossing (22°04'S, 115°34'E [datum: AUS84]; elev. 30 m). One *Carlia* had only its tail protruding from the falcon's beak; the other was on the road 10 cm from the head of the dead bird; both lizards exhibited no evidence

of external injury. A fire, visible from 2–3 km away, was still slowly burning in a northeasterly direction through the scrub and grassland within 10 m of the west side of the road; the burnt area next to the road extended for hundreds of meters. The habitat consisted of *Triodia* hummocks with scattered *Acacia* bushes on a stony plain with low stony ridges. Three additional lizard species were found on the road during a thorough search of the ~100 m along which the fire front moved over the next hour. These comprised, 1 adult *Delma nasuta* (Pygopodidae); 4 adult *Cyclodomorphus melanops melanops* (Scincidae: Lygosominae), of which 1 female later gave birth to 2 live young; and 1 adult *Heteronotia binoeii* (Gekkonidae). These animals were moving from the burning side towards the opposite side of the road; as no other reptiles were seen on the road on either side of the fire-affected stretch, all were probably fleeing the fire. Additionally, one adult *Lophognathus longirostris* (Agamidae) was found active on the ground among the blackened *Acacia* stems remaining next the road. Except for the two *Carlia*, all animals were uninjured.

The falcon probably obtained the *C. munda* from foraging at the margins of the fire. This and other smaller raptor species such as Black Kites, *Milvus migrans*, are well-known attendants of fires by day in the Australian arid zone (e.g., Olsen et al. 1993. Birds of Prey and Ground Birds. The National Photographic Index of Australian Wildlife/Angus and Robertson, Sydney. 200 pp.), occasionally in aggregations of hundreds (pers. obs.), and fire-margin foraging by opportunistic predators is documented in other ecosystems (e.g., Secretary Birds, *Sagittarius serpentarius*, in African veld; Steyn 1982. Birds of Prey of southern Africa. David Philip, Cape Town). Similarity in the condition of both *C. munda* implies that both were prey. This record also implies nocturnal foraging by the typically diurnal *F. b. berigora* might occur where fire provides 'artificial' light; Olsen et al. (*op. cit.*) also report flying and calling at night. Both *D. nasuta* and *C. melanops melanops* are intimately associated with *Triodia*, so our observations suggest that at least some individuals flee burning habitat; whether these individuals would use loose soil or burrow refuges, when available, is unknown. As fires in hummock grassland might be extensive, sometimes lasting for months and passing over hundreds of square kilometers (Suijdendorp, *op. cit.*; pers. obs.), raptor performance as lizard predators on advancing fire lines in such habitats and its effect on post-fire lizard populations might have special interest.

The two *C. munda* were deposited as vouchers in the collection of the Western Australian Museum (R94385-6); the bird was discarded. Brenda Coulson assisted in the field. Marc Hayes critically reviewed the manuscript.

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CHAMAELEO GRACILIS (Graceful Chameleon). **REPRODUCTION IN FLORIDA.**

Florida and Hawaii are the two states in the United States with the most severe invasive species problems (U.S. Congress 1993. Harmful Non-indigenous Species in the United States. Office of Technology Assessment, OTA-F-565,

Government Printing Office, Washington, D.C. 155 pp.). Over the last 50 years, increasing numbers of exotic lizard populations have been documented as established in Florida, with the number of non-native species breeding in the state now exceeding the number of native species (Meshaka et al. 2004. The Exotic Amphibians and Reptiles of Florida, Krieger Publishing Company, Malabar, Florida, 155 pp.). Among the many exotic lizard species known to have breeding populations in Florida, only one true chameleon, *Chamaeleo calyptratus*, is recorded as established (<http://wild.fwc.state.fl.us/critters/exotics>). Hence, we provide here an observation that may indicate that *Chamaeleo gracilis* also is reproducing in Florida.

At ca. 0930 h on 10 December 2004, an adult female *C. gracilis* (ca. 120 mm SVL) was captured walking on the center line of Citrus Blvd. in Palm City (27°02.507'N, 80°22.701'W, [datum: NAD27]; elev. 3 m). This represents the 2nd capture of a *C. gracilis* in this area, and several other sightings have been documented (Harold Parker, pers. comm.). The lizard seemed dehydrated and physically distressed, and was clearly gravid. After treatment by a veterinarian, it laid 22 eggs, about half of which seemed viable. After oviposition, the chameleon remained enlarged with additional eggs, but died before it could lay the remaining eggs. The overall number of eggs (~45) this specimen contained was towards the upper range recorded for the species (Spawls et al. 2002. A Field Guide to the Reptiles of East Africa. Academic Press, London, 543 pp.).

Multiple sightings of *C. gracilis* in the same area that includes a gravid female with viable eggs suggests that natural reproduction of this species might be occurring in Palm City, Florida.

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EGERNIA FORMOSA (Goldfields Crevice-skink). **ENDOPARASITES.** *Egernia formosa* is a medium-sized (adults 80 mm SVL) skink known from the interior of Western Australia (Cogger 1996. Reptile & Amphibians of Australia, 6th ed., Ralph Curtis Publ., Sanibel Island, Florida, 808 pp.). To our knowledge, no previous reports of parasites exist for *E. formosa*. The purpose of this note is to report the cestode *Oochoristica piankai* and the nematode *Pharyngodon hindlei* from *E. formosa*.

We examined 4 *E. formosa* (LACM 56427, 56431–56433; mean SVL = 92 mm ± 8.4 SD, range: 83–101 mm) collected January 1968, 70 km SW Wiluna, Western Australia, (27°05'S, 119°37'E, [datum: AGD66]; elev. 503 m) in the herpetology collection of the Natural History Museum of Los Angeles County (LACM), Los Angeles, California. The stomachs had previously been removed; the small and large intestines and body cavity were examined for helminths. Found in the small intestine of one skink (LACM 56432) were 15 *O. piankai* (prevalence: number infected/number examined × 100 = 25%). All 4 skinks contained *P. hindlei* in the large intestines (prevalence = 100%), mean intensity (mean number helminths per infected lizard) = 62.8 ± 25.9 SD, range:

26–82. Parasites were deposited in the United States National Parasite Collection (USNPC), Beltsville, Maryland as *Oochoristica piankai* (USNPC 96231) and *Pharyngodon hindlei* (USNPC 96232).

Burse et al. (1996. J. Helminthol. Soc. Washington 63:215–221) described *Oochoristica piankai* from *Moloch horridus*. Cestodes require two hosts (intermediate and definitive) for completion of their life cycle (Roberts and Janovy 2005. Gerald D. Schmidt & Larry S. Roberts' Foundations of Parasitology, 7th ed., McGraw-Hill Higher Education, Boston 702 pp.). The intermediate host of *O. piankai* is unknown; however, Hickman (1963. Pap. Proc. Royal Soc. Tasmania 97:81–104) reported a tenebrionid beetle served as the intermediate host of *Oochoristica vacuolata*. *Oochoristica piankai* has previously been reported from *Ctenophorus fordii*, *C. isolepis*, *C. reticulatus*, and *Nephrurus laevis* (Burse et al. 1999. Comp. Parasitol. 66:175–179; Goldberg et al. 2000. Comp. Parasitol. 67:108–114). Baylis (1930. Ann. Mag. Nat. Hist. 10:354–366) previously reported *Pharyngodon hindlei* in the skink *Tiliqua scincoides*. *Pharyngodon hindlei* is a member of the Oxyuroidea all of which have direct life cycles that do not involve an intermediate host (Anderson 2000. Nematode Parasites of Vertebrates. Their Development and Transmission, 2nd ed., CABI Publishing, Oxford, United Kingdom, 650 pp.). Infection likely occurs by exposure to substrate that has been contaminated with feces containing eggs. *Egernia formosa* is the second host recorded for this nematode. *Egernia formosa* represents a new host record for both *O. piankai* and *P. hindlei*.

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EGERNIA STRIATA (Elliptical-eye Skink). **ENDOPARASITES.** *Egernia striata* is a medium-sized (100 mm SVL adults) skink widely distributed through the interior of western to southwestern Northern Territory and northwestern South Australia (Cogger 1996. Reptiles & Amphibians of Australia, 6th ed., Ralph Curtis Publ., Sanibel Island, Florida, 808 pp.). To our knowledge, the only parasites previously reported from *E. striata* are the nematodes: *Parapharyngodon kartana*, *Pharyngodon tiliquae*, *Wanaristrongylus ctenoti* (Goldberg and Bursey 2000. Trans. Royal Soc. S. Aust. 124:127–133), *Johnpearsonia egerniae* (Durette-Desset et al 1994. Parasite 1:153–160), *Physalopteroides filicauda*, *Skrjabinoptera goldmanae*, and *Wanaristrongylus papangawurpae* (Jones 1995. Aust. J. Zool. 40:115–126). The purpose of this note is to report the pentastome *Kiricephalus* from *E. striata*.

One pentastome nymph was found in the body cavity of one female *E. striata* (95 mm SVL) from the herpetology collection of the Natural History Museum of Los Angeles County (LACM) collected 4 January 1968, 34 km W. Lorna Glen Homestead (26°14'S, 121°13'E, [datum: AGD66]; elev. 500 m), Western Australia; the *E. striata* was catalogued as LACM 56562. The